

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

DISH TECHNOLOGIES L.L.C. and SLING
TV L.L.C.

Plaintiffs,

v.

LULULEMON ATHLETICA INC. and
CURIOUSER PRODUCTS INC. (d/b/a
MIRROR)

Defendant.

C.A. No. _____

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs DISH Technologies L.L.C. and Sling TV L.L.C. (collectively, “DISH”) allege against Defendants lululemon athletica inc. and Curiouser Products Inc. (d/b/a MIRROR) (collectively, “Defendants”) as follows:

PARTIES

1. Plaintiff DISH Technologies L.L.C. is a limited liability company organized and existing under the laws of the State of Colorado, with its principal place of business at 9601 South Meridian Boulevard, Englewood, Colorado 80112. It provides innovation and technology services and products to, among others, the DISH Network® satellite pay TV service operated by DISH Network L.L.C. and the Sling TV® streaming pay TV service operated by Sling TV L.L.C.

2. Plaintiff Sling TV L.L.C. is a limited liability company organized and existing under the laws of the State of Colorado, with its principal place of business at 9601 South Meridian Boulevard, Englewood, Colorado 80112. It operates the Sling TV® streaming pay TV service.

3. On information and belief, Defendant lululemon athletica inc. (“lululemon”) is a corporation existing under the laws of the State of Delaware, with its principal place of business

at 1818 Cornwall Avenue, Vancouver, British Columbia V6J 1C7. lululemon athletica has appointed The Corporation Trust Company at 1209 Orange St., Wilmington DE 19801 as its agent for service of process.

4. On information and belief, Defendant MIRROR is a corporation existing under the laws of the State of Delaware, with its principal place of business at 1261 Broadway #208, New York, New York 10001. MIRROR has appointed The Corporation Trust Company at 1209 Orange St., Wilmington DE 19801 as its agent for service of process.

5. In June 2020, Defendant lululemon announced its intention to acquire Defendant MIRROR for \$500 million. Exhibit 1. As recognized by lululemon and MIRROR, the potential acquisition provided synergistic opportunities for both companies. For example, such acquisition would facilitate expansion of the “content creation partnership” which brought lululemon “sweat and meditation classes to the MIRROR platform.” *Id.* As another example, such acquisition would enable MIRROR to “strengthen its position and accelerate its growth” by leveraging lululemon’s infrastructure “including its store network and ecommerce channels.” *Id.*; *see also* Exhibit 2 at 10 (noting that lululemon could bring, as a benefit to MIRROR, the opportunity to “leverage distribution channels to scale growth”).

6. lululemon completed the acquisition of MIRROR on July 7, 2020, with MIRROR surviving the acquisition as a wholly-owned subsidiary of lululemon. Exhibit 3 at 2; Exhibit 4 at 9.

7. On information and belief, Defendants operate online streaming services through the Mirror Application and a flat panel fitness device marketed and sold as the “Mirror.” The Mirror is a “nearly invisible home gym” that allows users to stream live and on-demand workouts on an immersive display. Exhibit 5; *see also* Exhibit 6; Exhibit 7.

JURISDICTION AND VENUE

8. DISH asserts a claim for patent infringement against lululemon and MIRROR arising under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

9. This Court has personal jurisdiction over lululemon for at least the following reasons: (1) lululemon athletica inc. is incorporated in Delaware; (2) lululemon has committed acts of patent infringement and contributed to and induced acts of patent infringement by others in this District; (3) lululemon regularly does business or solicits business in this District; (4) lululemon engages in other persistent courses of conduct and derives substantial revenue by its offering of infringing products and services and providing infringing products and services in this District; and (5) lululemon has purposefully established substantial, systematic, and continuous contacts with this District and should reasonably expect to subject to suit here by its offering of infringing products and services and providing infringing products and services in this District.

10. This Court has personal jurisdiction over MIRROR for at least the following reasons: (1) Curiouser Products, Inc. is incorporated in Delaware; (2) MIRROR has committed acts of patent infringement and contributed to and induced acts of patent infringement by others in this District; (3) MIRROR regularly does business or solicits business in this District; (4) MIRROR engages in other persistent courses of conduct and derives substantial revenue by its offering of infringing products and services and providing infringing products and services in this District; and (5) MIRROR has purposefully established substantial, systematic, and continuous contacts with this District and should reasonably expect to be subject to suit here by its offering of infringing products and services and providing infringing products and services in this District.

11. Venue is proper in the District of Delaware under at least 28 U.S.C. §§ 1391(b), (c) and/or 1400(b) at least because both lululemon athletica inc. and Curiouser Products, Inc. are incorporated in Delaware. Additionally, on information and belief, lululemon and MIRROR have committed acts of infringement in the State of Delaware, including but not limited to offering products or services that infringe one or more of DISH's asserted patents to customers located in Delaware and/or for use in Delaware.

THE ABR PATENTS

12. On August 2, 2016, the PTO duly and lawfully issued United States Patent No. 9,407,564 ("the '564 Patent"), entitled "Apparatus, system, and method for adaptive-rate shifting of streaming content." A true and correct copy of the '564 Patent is attached as Exhibit A. Subject to the exclusive license referenced below, all rights, title, and interest in and to the '564 Patent have been assigned to DISH Technologies L.L.C., which is the sole owner of the '564 Patent.

13. On November 5, 2019, the PTO duly and lawfully issued United States Patent No. 10,469,554 ("the '554 Patent"), entitled "Apparatus, system, and method for multi-bitrate content streaming." A true and correct copy of the '554 Patent is attached as Exhibit B. Subject to the exclusive license referenced below, all rights, title, and interest in and to the '554 Patent have been assigned to DISH Technologies L.L.C., which is the sole owner of the '554 Patent.

14. On November 5, 2019, the PTO duly and lawfully issued United States Patent No. 10,469,555 ("the '555 Patent"), entitled "Apparatus, system, and method for multi-bitrate content streaming." A true and correct copy of the '555 Patent is attached as Exhibit C. Subject to the exclusive license referenced below, all rights, title, and interest in and to the '555 Patent have been assigned to DISH Technologies L.L.C., which is the sole owner of the '555 Patent.

15. On March 19, 2013, the PTO duly and lawfully issued United States Patent No. 10,757,156 (“the ’156 Patent”), entitled “Apparatus, system, and method for multi-bitrate content streaming.” A true and correct copy of the ’156 Patent is attached as Exhibit D. Subject to the exclusive license referenced below, all rights, title, and interest in and to the ’156 Patent have been assigned to DISH Technologies L.L.C., which is the sole owner of the ’156 Patent.

16. On March 16, 2021, the PTO duly and lawfully issued United States Patent No. 10,951,680 (“the ’680 Patent”), entitled “Apparatus, system, and method for multi-bitrate content streaming.” A true and correct copy of the ’680 Patent is attached as Exhibit E. Subject to the exclusive license referenced below, all rights, title, and interest in and to the ’680 Patent have been assigned to DISH Technologies L.L.C., which is the sole owner of the ’680 Patent.

17. DISH Technologies has entered into an exclusive license with Sling TV L.L.C. granting substantial rights in the above-identified patents to Sling TV L.L.C., including the right to sue thereon.

18. Certain of Sling TV L.L.C.’s products and services practice one or more of the Asserted Patents. In compliance with 35 U.S.C. § 287(a), Sling TV L.L.C. marks its practicing products and requires its sublicensees to do the same.

19. Additionally, certain products and services offered by DISH Technologies’ affiliate DISH Network L.L.C. (“DISH Network”) also practice the Asserted Patents. DISH Network marks its practicing products and maintains a webpage identifying a listing of patents applicable to DISH Network’s products. *See Intellectual Property, DISH NETWORK*, <https://www.dish.com/ip/> (last visited Feb. 23, 2021).

20. The claimed inventions in these patents are directed to various novel aspects and improvements to adaptive bitrate streaming (“ABR”) technology. The ’564, ’554, ’555, ’156,

and '680 Patents (collectively, "the ABR Patents") are currently in full force and effect. The patent applications underlying the '564 and '156 Patents are continuations of U.S. Patent Application No. 11/116,783. Each of the '554, '555, '156, and '680 Patents issued from patent applications that are continuations-in-part of U.S. Patent Application No. 11/116,783.

BACKGROUND OF THE DISPUTE

MOVE IS A PIONEER OF ADAPTIVE BITRATE TECHNOLOGY

21. MOVE Networks, Inc. ("MOVE") was the original owner of the ABR Patents. MOVE invented and patented HTTP-based Adaptive Bitrate Streaming to improve the quality of streamed video content over the Internet. While at MOVE, inventors Drew Major, Mark Hurst, and later, David Brueck, (collectively, "the ABR Inventors") observed that the Internet was fast becoming a preferred method for distributing live and recorded video to individuals even though content delivery over the Internet at the time was notoriously unreliable, expensive and inferior in quality compared to cable- and satellite-delivered content. To access video content online, users were left with two mediocre choices: (1) waiting for their content to download (which did not support immediate viewing of live content and often required the user to select the quality desired: LOW, MEDIUM, or HIGH, which in turn determined how long the user had to wait before viewing); or (2) streaming live or recorded content, which often was unreliable (pausing to "buffer") or only worked at low-resolution.

22. The ABR Inventors knew that media streaming had not reached its full potential and that, through research and improvement, it was possible that streaming could rival the quality of cable and satellite delivered content. The state-of-the-art, however, was unacceptable prior to the inventions disclosed in the patents-in-suit. Often during playback, the streaming technologies did a poor job selecting the video quality / resolution that the network bandwidth and reliability could

support. Most commercial systems, from companies like RealNetworks, Adobe, Microsoft, or Apple, were proprietary implementations based on public Internet standards (RTP/RTSP). Common standards notwithstanding, the proprietary implementations were mutually incompatible. They were expensive to deploy by the Content Delivery Networks (“CDNs”) and required many servers to scale to a large number of viewers. In addition, these technologies often required custom server architectures and routing IT configurations to penetrate Internet firewalls. The ABR Inventors recognized these shortcomings as an opportunity and developed a better solution.

23. The ABR Patents’ specifications detail the need for improved data transport in content streaming. Users will generally choose streaming over downloading because “they tend to want to see or hear the media files instantaneously.” *See, e.g.,* ’564 Patent, Exhibit A, at col. 1, ll. 49–51. Unfortunately for protocols at the time, “[s]treaming offers the advantage of immediate access to the content but currently sacrifices quality compared with downloading a file of the same content.” *See, e.g., id.* col. 1, ll. 52–54. The ABR Inventors observed that “a need exists for an [invention] that alleviates the problems of reliability, efficiency, and latency” encountered in currently available content streaming systems. *See, e.g., id.* col. 2, ll. 39–41.

24. To address these needs, the ABR Inventors came up with a novel solution: HTTP-based Adaptive Bitrate Streaming. ABR segments the full content file into smaller units (“streamlets”) in multiple bitrates and delivers them over HTTP / TCP, the underlying protocols used for reliably transmitting data over the Internet. The ABR Inventors’ approach enables content delivery to adapt to the bandwidth available at any particular time, ensuring delivery of the highest possible quality content throughout the course of the stream. The playback client device continuously observes the quality of a user’s network connection and adjusts the requested quality of the streamed content. The other RTP/RTSP-based technologies used a client / server

architecture, where the server determined the bitrate to send to the client. The other technologies also did not segment the content, usually delivering it as a continuous stream of bits or as a single large file. Segmenting the content allows the playback device to easily change bitrates. The result is that today, MOVE's patented ABR technology allows Internet users to stream content from across the world in real time at the highest possible quality.

25. The ABR Patents' specifications describe how the MOVE inventors significantly improved the functionality of computer devices used to stream content data over a network: "[A] need exists for an apparatus, system, and method that alleviate the problems of reliability, efficiency, and latency [during data transport streaming over a network]. Additionally, such an apparatus, system, and method would offer instantaneous viewing along with the ability to fast forward, rewind, direct seek, and browse multiple streams." *See, e.g., id.* col. 2, ll. 39–44. The claims of the ABR Patents embody these improvements by providing a particular solution to these problems. The ABR Patents' specifications explain that "[t]he present invention has been developed in response to the present state of the art, and in particular, in response to the problems and needs in the art that have not yet been fully solved by currently available content streaming systems. *See, e.g., id.* col. 2, ll. 52–55. Thus, the specifications explain "the present invention has been developed to provide an apparatus, system, and method for adaptive-rate content streaming that overcome many or all of the above-discussed shortcomings in the art." *See, e.g., id.* col. 2, ll. 56–59. The claims of the ABR Patents include numerous unconventional and revolutionary elements that, taken as a whole, provide this solution that improves the functionality of computer devices used to stream content data over a network.

26. One unconventional but fundamental improvement found in the claims of the ABR Patents is the creation of sets of streamlets from the original large content file, where a plurality of

streamlets in each set are aligned by starting time and duration (typically a few seconds) but have different bitrates. By segmenting and then encoding the streamlets, the claims of the ABR Patent allow for contiguous playback of the streamlets that independently yields playback of the full content. The common alignment of the streamlets in each set allows a playback device to select one quality of streamlet from a particular set, and, as needed to adjust for changing bandwidth resources, to select a different quality of streamlet from the subsequent set. When the bandwidth of the user's network is constrained, the client can select a lower bitrate to maintain playback continuity instead of "buffering." By using streamlets, the claims of the ABR Patents eliminate the need for users to download the full content file before beginning playback, thereby offering instantaneous viewing along with the ability to fast forward, rewind, direct seek, and browse multiple streams. Additionally, segmenting the media into streamlets as required by the claims of the ABR Patents enables users to retrieve and enjoy content at the most appropriate bitrate possible as the media is streamed, thereby reducing latency and improving the reliability and efficiency of computer devices used to stream content data over a network. It is also well suited for live stream playback.

27. Another non-routine and revolutionary improvement found in the claims of the ABR Patents is that the client controls switching between different bitrates. The benefits of using an intelligent client to make the decisions and switch between different bitrate streamlets are two-fold. First, the claims of the ABR Patents reduce latency and improve the efficiency of computer devices used to stream content data over a network because the client is in a better position to determine the appropriate streamlet by measuring the actual throughput of the network at its point of reception. Second, the claims of the ABR Patents improve the reliability and efficiency of computer devices used to stream content data over a network because moving the decision-making

to the client effectively eliminates the need for a customized video server. Instead, a standard web server can be employed to host all the content's streamlets. Streamlets may be requested by a client using the standard HTTP/TCP protocol—the web standard upon which the Internet is built. Shifting control of switching between different bitrates to the clients allows for access to the segmented content that can be scaled exponentially through the use of standardized web caches. These benefits also allow for a vast reduction in operating and publishing costs. Thus, the claims of the ABR Patents provide a reliable and efficient solution that improves the functioning of computer devices used to stream content data while reducing overall latency and network congestion.

28. The ABR Inventors' improvements to streaming succeeded where others tried and failed. During the late 1990s, established streaming companies, including RealNetworks, Adobe, Microsoft, and Apple, separately attempted to develop a successful multiple bitrate streaming platform by using proprietary implementations of the RTP/RTSP standards. None of these systems succeeded at making bitrate switching consistent and none actually worked over the Internet.

29. The unconventional and revolutionary improvements embodied by the claims of the ABR Patents were also recognized by numerous industry leaders and commentators. For example, Forbes explained that Move Networks was “at the forefront of [the] next evolution” of media streaming. Exhibit 8. Forbes explained that the technology covered by the ABR Patents “breaks up the video into bits and efficiently reorganizes them over the network so there's no need for the special computer servers and dedicated transmission lines.” *Id.* Move Networks was identified as a member of the Red Herring 100 in 2007. Exhibit 9. Industry leaders “have regarded the Red Herring 100 lists as an invaluable instrument to discover and advocate the promising startups that will lead the next wave of disruption and innovation.” Exhibit 10. Similarly, Move Networks was

also named as a member of the OnHollywood 100 in 2007. Exhibit 11. The list is curated by AlwaysOn to “introduce a new generation of game-changing players in the digital entertainment space.” *Id.* Move Networks was also nominated as a finalist in the 2007 Crunchies for the “Best Technology Innovation / Achievement” category by GigaOm, Read/WriteWeb, VentureBeat, and TechCrunch. Exhibit 12.

ABR PATENTS SELL FOR \$45 MILLION

30. In December of 2010, EchoStar Advanced Technologies L.L.C., then a wholly owned subsidiary of EchoStar Corporation, spent \$45 million to acquire MOVE and its ABR Patent portfolio. Recognizing the ingenuity of MOVE’s ABR technology and the value-added for its customers and their increasing interest in quality online content delivery, DISH affiliate DISH Digital Holding L.L.C. acquired EchoStar Advanced Technologies L.L.C. in connection with a joint venture with EchoStar Corporation in 2012. EchoStar Advanced Technologies L.L.C., which was later renamed DISH Digital L.L.C., transferred the ABR Patents to EchoStar Technologies L.L.C. (a subsidiary of EchoStar Corporation) in 2014. In February 2017, EchoStar Technologies L.L.C. became a subsidiary of DISH Network L.L.C., and in February 2018, was renamed DISH Technologies L.L.C.

31. DISH and its affiliated companies are a leading provider of Internet streaming services. It is a leading investor and innovator in infrastructure and technologies that will meet the personalized needs of its increasingly diverse pool of customers. Since its founding, DISH and its affiliated companies have invested millions in research and development and acquisition of novel technologies that will resolve long-felt problems and needs across its industry.

32. As the public continues to increasingly rely on the Internet for its informational and entertainment needs, one such problem into which DISH and its affiliated companies have

dedicated great time and resources is improving the quality of streaming media. The specific entities that implement and own the technology covered by MOVE's patent portfolio have undergone significant evolution as these entities continue to improve upon ABR and advance reliable delivery of high-resolution content over the Internet.

33. DISH's recent investments in ABR have already proven a success. Sling TV L.L.C. is DISH and its affiliated companies' main Internet-delivered content provider, offering programming to numerous Internet streaming devices. Since the launch of Sling TV in the beginning of 2015, Sling TV has grown to over 2.474 million subscribers, who are now receiving a live TV video experience comparable to cable or satellite.

**PRODUCTS AND SERVICES OFFERED BY LULULEMON AND MIRROR
INFRINGE THE ABR PATENTS**

34. Defendants have been and are now directly infringing and/or indirectly infringing the ABR Patents.

35. On information and belief, Defendants are distributors of live and on-demand content via the Internet. *See* Exhibit 13; Exhibit 14. Defendants make, use, sell, and offer for sale in the United States products and services that infringe the ABR Patents, and continue to do so. These infringing products and services include online streaming services operated by Defendants, including the Mirror Application, and the Mirror (collectively, "the Accused Streaming Services").

36. The Accused Streaming Services integrate hardware, software, and content to create a unique user experience. For example, MIRROR CEO Brynn Putnam has explained that "MIRROR is creating a new category of in-home fitness with cutting-edge hardware, responsive software, and best-in-class content to provide a uniquely immersive, and personalized workout experience." Exhibit 15. The MIRROR software facilitates the delivery of this experience which

includes a real-time aspect that distinguishes the Mirror from traditional methods of exercising. *Id.* (“MIRROR stands apart from the traditional gym because it *adapts to the needs of an individual user in real-time*” and “We create custom hardware, proprietary software and original content so that every element of the experience is deeply aligned with the user’s needs, and *can quickly respond to improve the experience as those needs evolve*” (emphases added)).

37. Streaming enables subscribers to enjoy full access to MIRROR’s content, including its live classes. *See* Exhibit 16. An example of a live-streamed fitness class is shown below:

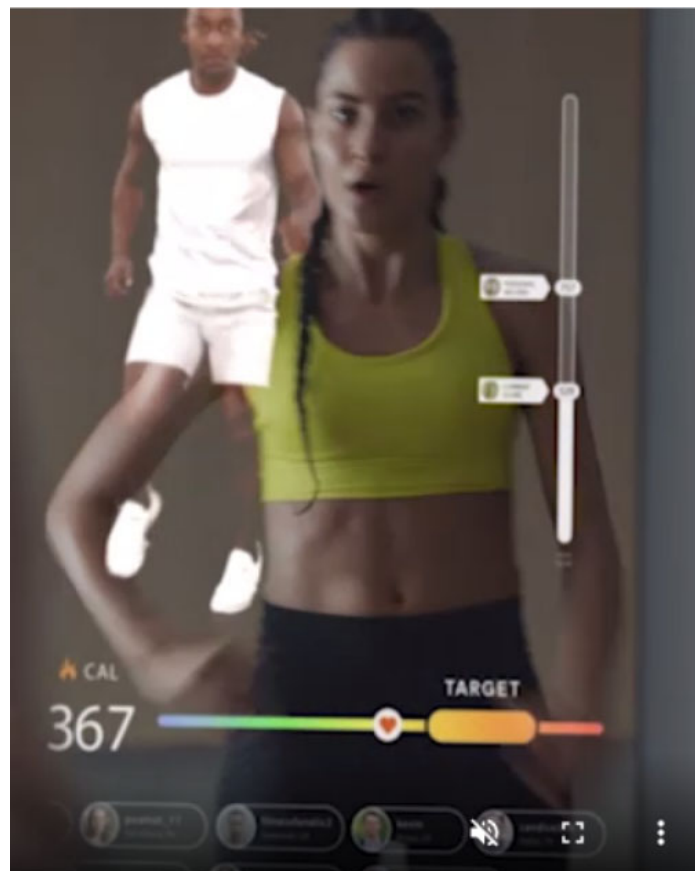



Exhibit 13 at 1–2.

38. On information and belief, Defendants have sold and offered for sale, and sell and offer for sale, the Accused Streaming Services through their respective ecommerce websites:

THRU 4/3, GET FREE DELIVERY & INSTALLATION WITH CODE APRIL21 (\$250 VALUE)! [SHOP NOW](#)

MIRROR HOW IT WORKS WORKOUTS REVIEWS HOME TRIAL ACCESSORIES [BUY THE MIRROR](#)




★★★★★ 4.9/5 [411 reviews](#)





THE MIRROR

Starting at **\$1,495** Or pay as low as **\$42/mo.** [Learn more](#)



[Mirror Membership Separate](#)


 Save \$250 with code **APRIL21**

ADD TO CART

-  MIRROR DIGITAL INCLUDED
-  30-DAY RISK-FREE TRIAL
-  STANDARD WARRANTY
-  0% APR FINANCING

Buy The Mirror, MIRROR, <https://www.mirror.co/shop/mirror> (last visited Apr. 3, 2021).

 WOMEN MEN ACCESSORIES COMMUNITY MIRROR Sign In Search 

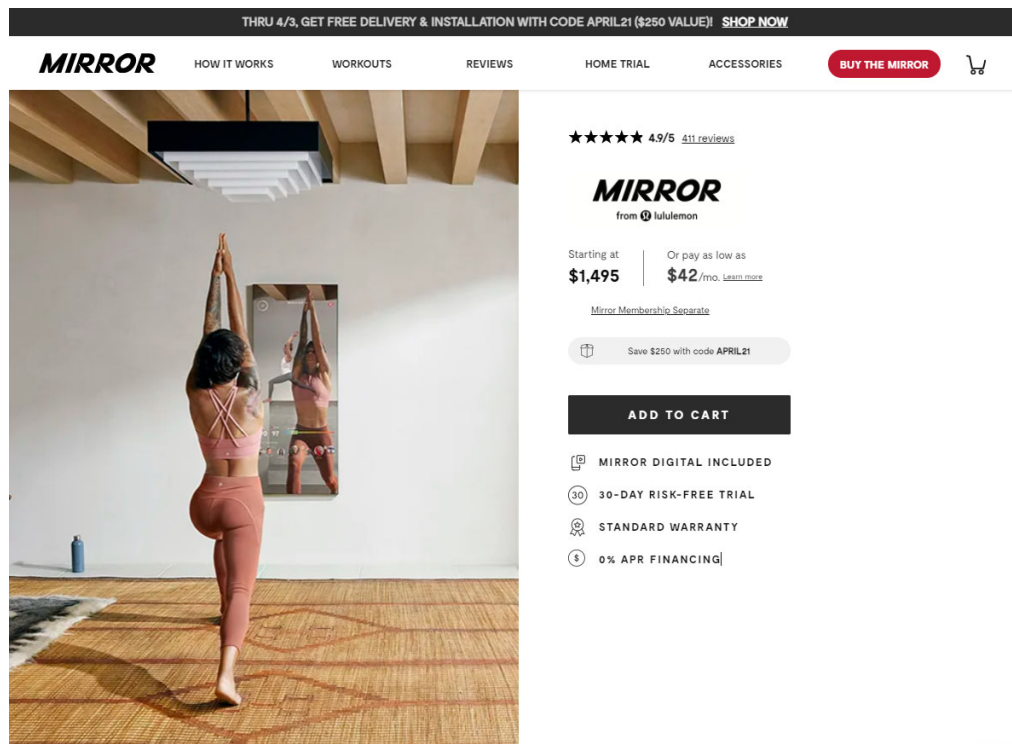


Meet MIRROR.

The nearly invisible home gym that transforms less than two feet of wall space into a cardio class, a yoga studio, a boxing ring, and so much more.

[Shop The Mirror](#)

Mirror, LULULEMON, <https://shop.lululemon.com/story/mirror-home-gym> (last visited Apr. 3, 2021). Clicking the “Shop the Mirror” hyperlink shown in the above screen capture redirects to a lululemon-branded MIRROR webpage which allows an interested customer to purchase the Mirror:



Mirror from *lululemon*, MIRROR, https://www.mirror.co/shop/mirror/?utm_source=lululemon_site&utm_medium=lululemon&utm_campaign=lululemon_story_page (last visited Apr. 3, 2021).

39. On information and belief, Defendants have also sold and offered for sale, and sell and offer for sale, the Accused Streaming Services via brick and mortar stores. According to the MIRROR website, MIRROR has 19 locations (which it refers to as “showrooms”) in the United States. Exhibit 17. These showrooms offer interested customers an opportunity to see and test the Accused Streaming Services. *Id.* (“Seeing is believing. Visit a showroom to try a sample workout and experience the Mirror for yourself.”). As identified on the MIRROR website, many of the

showroom locations are lululemon retail stores. *Id.* (identifying 36 of the 37 MIRROR showrooms as being located within a lululemon retail store). On information and belief, hundreds of lululemon stores will double as MIRROR showrooms by the end of 2021. 60. *Brynn Putnam, Founder & CEO of Mirror*, FITT INSIDER WITH JOE VENNARE, at 20:50 (Dec. 8, 2020), <https://podcasts.apple.com/us/podcast/60-brynn-putnam-founder-ceo-of-mirror/id1481418164?i=1000501704754> (“FITT Insider Podcast”) (stating, post lululemon-MIRROR acquisition: “to be able to do that sort of a retail store rollout in such a quick amount of time *with an eye towards hundreds of stores next year* [] is just really exciting” and “*the store rollout [] is one of our main focuses* for holiday [2020] and *into the new year* [2021]” (emphases added)).

CLAIMS FOR RELIEF

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 9,407,564

DIRECT INFRINGEMENT

40. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–39 of the Complaint as if fully set forth herein.

41. On information and belief, Defendants directly infringe, literally and/or under the doctrine of equivalents, at least claim 8 of the ’564 Patent, which recites:

A method executable by an end user station to present rate-adaptive streams received via at least one transmission control protocol (TCP) connection with a server over a network, the method comprising;

streaming, by a media player operating on the end user station, a video from the server via the at least one TCP connection over the network, wherein multiple different copies of the video encoded at different bit rates are stored as multiple sets of files on the server, wherein each of the files yields a different portion of the video on playback, wherein the files across the different copies yield the same portions of the video on playback, and wherein each of the files comprises a time index such that the files whose playback is the same portion of the video for each of the

different copies have the same time index in relation to the beginning of the video, and wherein the streaming comprises:

requesting by the media player a plurality of sequential files of one of the copies from the server based on the time indexes;

automatically requesting by the media player from the server subsequent portions of the video by requesting for each such portion one of the files from one of the copies dependent upon successive determinations by the media player to shift the playback quality to a higher or lower quality one of the different copies, the automatically requesting including repeatedly generating a factor indicative of the current ability to sustain the streaming of the video using the files from different ones of the copies, wherein the factor relates to the performance of the network; and

making the successive determinations to shift the playback quality based on the factor to achieve continuous playback of the video using the files of the highest quality one of the copies determined sustainable at that time, wherein the making the successive determinations to shift comprises upshifting to a higher quality one of the different copies when the at least one factor is greater than a first threshold and downshifting to a lower quality one of the different copies when the at least one factor is less than a second threshold; and

presenting the video by playing back the requested media files with the media player on the end user station in order of ascending playback time.

42. The Accused Streaming Services receive segments of selected video program for playback of programming over a network connection. The Accused Streaming Services adapt their requests for segments from a set of segments with the same content but varying quality based upon the quality of the network connection. Exhibit A-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.¹

43. On information and belief, Defendants possess knowledge of, and are aware of, the '564 Patent, or became aware of this patent at the time of filing this lawsuit.

1. DISH notes that Exhibit A-1 and Exhibits B-1, C-1, D-1, and E-1, *see infra*, are based exclusively on publicly available information, and without the benefit of any Court claim construction. Accordingly, for each Count below, DISH reserves the right to supplement, amend or modify the analysis as warranted in light of additional facts, claim construction, or other developments. DISH further reserves the right to add additional claims as the case progresses.

44. Defendants' acts of infringement have injured and damaged DISH and will continue to injure and damage DISH.

45. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon information and belief, Defendants will continue these infringing acts unless enjoined by this court.

INDIRECT INFRINGEMENT

46. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–45 of the Complaint as if fully set forth herein.

47. On information and belief, Defendants indirectly infringe, literally and/or under the doctrine of equivalents, at least claim 8 of the '564 Patent, which recites:

A method executable by an end user station to present rate-adaptive streams received via at least one transmission control protocol (TCP) connection with a server over a network, the method comprising;

streaming, by a media player operating on the end user station, a video from the server via the at least one TCP connection over the network, wherein multiple different copies of the video encoded at different bit rates are stored as multiple sets of files on the server, wherein each of the files yields a different portion of the video on playback, wherein the files across the different copies yield the same portions of the video on playback, and wherein each of the files comprises a time index such that the files whose playback is the same portion of the video for each of the different copies have the same time index in relation to the beginning of the video, and wherein the streaming comprises:

requesting by the media player a plurality of sequential files of one of the copies from the server based on the time indexes;

automatically requesting by the media player from the server subsequent portions of the video by requesting for each such portion one of the files from one of the copies dependent upon successive determinations by the media player to shift the playback quality to a higher or lower quality one of the different copies, the automatically requesting including repeatedly generating a factor indicative of the current ability to sustain the streaming of the video using the files from different ones of the copies, wherein the factor relates to the performance of the network; and

making the successive determinations to shift the playback quality based on the factor to achieve continuous playback of the video using the files of the highest quality one of the copies determined sustainable at that time, wherein the making the successive determinations to shift comprises upshifting to a higher quality one of the different copies when the at least one factor is greater than a first threshold and downshifting to a lower quality one of the different copies when the at least one factor is less than a second threshold; and

presenting the video by playing back the requested media files with the media player on the end user station in order of ascending playback time.

48. The Accused Streaming Services receive segments of a selected video program for playback of programming over a network connection. The Accused Streaming Services adapt requests for segments from a set of segments with the same content but varying quality based upon the quality of the network connection. Exhibit A-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.

INDIRECT INFRINGEMENT BY INDUCEMENT

49. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–48 of the Complaint as if fully set forth herein.

50. On information and belief, Defendants are liable for inducing infringement of the '564 Patent under 35 U.S.C. § 271(b) by having knowledge of the '564 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '564 Patent, with specific intent, by their customers.

51. Specifically, Defendants actively induce infringement of the '564 Patent by, *inter alia*, training their customers on the use of the Accused Streaming Services and/or promotion and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for implementing adaptive-rate content streaming as claimed in the '564 Patent.

52. Defendants' customers for the Accused Streaming Services directly infringe the '564 Patent by making, using, selling, and/or offering for sale the Accused Streaming Services.

53. For example, Defendants actively induce infringement of the '564 Patent, because Defendants have knowledge that end users of the Accused Streaming Services including, but not limited to, users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms, use Defendants' infringing Accused Streaming Services in the United States, and because Defendants encourage such acts resulting in direct patent infringement, by, *inter alia*, training, promotion, and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for their use of adaptive-rate content streaming as claimed in the '564 Patent. *See, e.g.*, Exhibit 17 (inviting customers to "try a sample workout and experience the Mirror"); Exhibit 18 (instructing users how to navigate the Mirror App to deliver live and on-demand content).

54. On information and belief, Defendants intend to, and continue to intend to, indirectly infringe the '564 Patent through inducement of the sale and use of the Accused Streaming Services.

55. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '564 Patent.

56. On information and belief, despite knowing that their actions constituted induced infringement of the '564 Patent and/or despite knowing that there was a high likelihood that their

actions constituted induced infringement of the patent, Defendants nevertheless continued their infringing actions, and continue to make, use, and sell, the Accused Streaming Services.

57. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '564 Patent.

58. Defendants' acts of induced infringement have injured and damaged DISH and will continue to injure and damage DISH.

59. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon information and belief, Defendants will continue these infringing acts unless enjoined by this Court.

INDIRECT INFRINGEMENT BY CONTRIBUTORY INFRINGEMENT

60. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–59 of the Complaint as if fully set forth herein.

61. Defendants are liable for contributory infringement of the '564 Patent under 35 U.S.C § 271(c) by having sold or offered to sell, and continuing to sell or offer for sale the Accused Streaming Services within the United States because the Accused Streaming Services constitute a material part of the invention embodied in the '564 Patent, which Defendants know to be especially made and/or especially adapted for use in infringement of the '564 Patent, and which is not a staple article or commodity of commerce suitable for substantial non-infringing use.

62. On information and belief, Defendants are liable for contributory infringement by having knowledge of the '564 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '564 Patent by their customers, including users and subscribers, who use the Accused Streaming Services.

63. Specifically, Defendants contribute to infringement of the '564 Patent by, *inter alia*, promotion, and/or sales of the infringing Accused Streaming Services to Defendants' customers, including users and subscribers, for their use of adaptive-rate content streaming as claimed in the '564 Patent. Those customers directly infringe the '564 Patent by using the Accused Streaming Services.

64. For example, Defendants are liable for contributory infringement by knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, Defendants' customers, including users and subscribers, to directly infringe the '564 Patent by using the Accused Streaming Services in the United States.

65. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '564 Patent and that the Accused Streaming Services were especially made and/or especially adapted for use in infringement of the '564 Patent and were not a staple article or commodity of commerce suitable for substantial non-infringing use.

66. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '564 Patent.

67. Defendants' past and ongoing infringement of the '564 Patent has and will continue to irreparably harm DISH.

68. Defendants' past and ongoing infringement of the '564 Patent has and will continue to cause DISH damages.

69. DISH is asserting claims 1 and 8 of the '564 Patent and some or all of the dependents to those claims.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 10,469,554

DIRECT INFRINGEMENT

70. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–69 of the Complaint as if fully set forth herein.

71. On information and belief, Defendants directly infringe, literally and/or under the doctrine of equivalents, at least claim 16 of the '554 Patent, which recites:

An end user station to stream a live event video over a network from a server for playback of the video, the content player device comprising:

a processor;

a digital processing apparatus memory device comprising non-transitory machine-readable instructions that, when executed, cause the processor to:

establish one or more network connections between the end user station and the server, wherein the server is configured to access at least one of a plurality of groups of streamlets;

wherein the live event video is encoded at a plurality of different bitrates to create a plurality of streams including at least a low quality stream, a medium quality stream, and a high quality stream, each of the low quality stream, the medium quality stream, and the high quality stream comprising a group of streamlets encoded at the same respective one of the different bitrates, each group comprising at least first and second streamlets, each of the streamlets corresponding to a portion of the live event video;

wherein at least one of the low quality stream, the medium quality stream, and the high quality stream is encoded at a bit rate of no less than 600 kbps; and

wherein the first streamlets of each of the low quality stream, the medium quality stream and the high quality stream each has an equal playback duration and each of the first streamlets encodes the same portion of the live event video at a different one of the different bitrates;

select a specific one of the low quality stream, the medium quality stream, and the high quality stream based upon a determination by the end user station to select a higher or lower bitrate version of the streams;

place a streamlet request to the server over the one or more network connections for the first streamlet of the selected stream;

receive the requested first streamlet from the server via the one or more network connections; and

provide the received first streamlet for playback of the live event video.

72. The Accused Streaming Services receive segments of a selected video program for playback of programming over a network connection. The Accused Streaming Services adapt requests for segments from a set of segments with the same content but varying quality based upon the quality of the network connection. Exhibit B-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.²

73. On information and belief, Defendants possess knowledge of, and are aware of, the '554 Patent, or became aware of this patent at the time of filing this lawsuit.

74. Defendants' acts of infringement have injured and damaged DISH and will continue to injure and damage DISH.

75. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon information and belief, Defendants will continue these infringing acts unless enjoined by this court.

INDIRECT INFRINGEMENT

76. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–75 of the Complaint as if fully set forth herein.

2. DISH notes that Exhibit B-1, Exhibit A-1, *see supra* and Exhibits C-1, D-1, and E-1, *see infra*, are based exclusively on publicly available information, and without the benefit of any Court claim construction. Accordingly, for each Count below, DISH reserves the right to supplement, amend or modify the analysis as warranted in light of additional facts, claim construction, or other developments. DISH further reserves the right to add additional claims as the case progresses.

77. On information and belief, Defendants indirectly infringe, literally and/or under the doctrine of equivalents, at least claim 16 of the '554 Patent, which recites:

An end user station to stream a live event video over a network from a server for playback of the video, the content player device comprising:

a processor;

a digital processing apparatus memory device comprising non-transitory machine-readable instructions that, when executed, cause the processor to:

establish one or more network connections between the end user station and the server, wherein the server is configured to access at least one of a plurality of groups of streamlets;

wherein the live event video is encoded at a plurality of different bitrates to create a plurality of streams including at least a low quality stream, a medium quality stream, and a high quality stream, each of the low quality stream, the medium quality stream, and the high quality stream comprising a group of streamlets encoded at the same respective one of the different bitrates, each group comprising at least first and second streamlets, each of the streamlets corresponding to a portion of the live event video;

wherein at least one of the low quality stream, the medium quality stream, and the high quality stream is encoded at a bit rate of no less than 600 kbps; and

wherein the first streamlets of each of the low quality stream, the medium quality stream and the high quality stream each has an equal playback duration and each of the first streamlets encodes the same portion of the live event video at a different one of the different bitrates;

select a specific one of the low quality stream, the medium quality stream, and the high quality stream based upon a determination by the end user station to select a higher or lower bitrate version of the streams;

place a streamlet request to the server over the one or more network connections for the first streamlet of the selected stream;

receive the requested first streamlet from the server via the one or more network connections; and

provide the received first streamlet for playback of the live event video.

78. The Accused Streaming Services receive segments of a selected video program for playback of programming over a network connection. The Accused Streaming Services adapt

requests for segments from a set of segments with the same content but varying quality based upon the quality of the network connection. Exhibit B-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.

INDIRECT INFRINGEMENT BY INDUCEMENT

79. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–78 of the Complaint as if fully set forth herein.

80. On information and belief, Defendants are liable for inducing infringement of the '554 Patent under 35 U.S.C. § 271(b) by having knowledge of the '554 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '554 Patent, with specific intent, by their customers.

81. Specifically, Defendants actively induce infringement of the '554 Patent by, *inter alia*, training their customers on the use of the Accused Streaming Services and/or promotion and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for implementing adaptive-rate content streaming as claimed in the '554 Patent.

82. Defendants' customers for the Accused Streaming Services directly infringe the '554 Patent by making, using, selling, and/or offering for sale the Accused Streaming Services.

83. For example, Defendants actively induce infringement of the '554 Patent, because Defendants have knowledge that end users of the Accused Streaming Services including, but not limited to, users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms, use Defendants' infringing Accused Streaming Services in the United States, and because Defendants encourage such acts resulting in direct patent infringement, by, *inter alia*, training, promotion, and/or sales of the Accused Streaming Services to Defendants'

customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for their use of adaptive-rate content streaming as claimed in the '554 Patent. *See, e.g.*, Exhibit 17 (inviting customers to “try a sample workout and experience the Mirror”); Exhibit 18 (instructing users how to navigate the Mirror App to deliver live and on-demand content).

84. On information and belief, Defendants intend to, and continue to intend to, indirectly infringe the '554 Patent through inducement of the sale and use of the Accused Streaming Services.

85. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '554 Patent.

86. On information and belief, despite knowing that their actions constituted induced infringement of the '554 Patent and/or despite knowing that there was a high likelihood that their actions constituted induced infringement of the patent, Defendants nevertheless continued their infringing actions, and continue to make, use, and sell, the Accused Streaming Services.

87. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '554 Patent.

88. Defendants' acts of induced infringement have injured and damaged DISH and will continue to injure and damage DISH.

89. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon

information and belief, Defendants will continue these infringing acts unless enjoined by this Court.

INDIRECT INFRINGEMENT BY CONTRIBUTORY INFRINGEMENT

90. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–89 of the Complaint as if fully set forth herein.

91. Defendants are liable for contributory infringement of the '554 Patent under 35 U.S.C § 271(c) by having sold or offered to sell, and continuing to sell or offer for sale the Accused Streaming Services within the United States because the Accused Streaming Services constitute a material part of the invention embodied in the '554 Patent, which Defendants know to be especially made and/or especially adapted for use in infringement of the '554 Patent, and which is not a staple article or commodity of commerce suitable for substantial non-infringing use.

92. On information and belief, Defendants are liable for contributory infringement by having knowledge of the '554 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '554 Patent by their customers, including users and subscribers, who use the Accused Streaming Services.

93. Specifically, Defendants contribute to infringement of the '554 Patent by, *inter alia*, promotion, and/or sales of the infringing Accused Streaming Services to Defendants' customers, including users and subscribers, for their use of adaptive-rate content streaming as claimed in the '554 Patent. Those customers directly infringe the '554 Patent by using the Accused Streaming Services.

94. For example, Defendants are liable for contributory infringement by knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, Defendants'

customers, including users and subscribers, to directly infringe the '554 Patent by using the Accused Streaming Services in the United States.

95. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '554 Patent and that the Accused Streaming Services were especially made and/or especially adapted for use in infringement of the '554 Patent and were not a staple article or commodity of commerce suitable for substantial non-infringing use.

96. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '554 Patent.

97. Defendants' past and ongoing infringement of the '554 Patent has and will continue to irreparably harm DISH.

98. Defendants' past and ongoing infringement of the '554 Patent has and will continue to cause DISH damages.

99. DISH is asserting claims 16 and 30 of the '554 Patent and some or all of the dependents to those claims.

COUNT III: INFRINGEMENT OF U.S. PATENT NO. 10,469,555

DIRECT INFRINGEMENT

100. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–99 of the Complaint as if fully set forth herein.

101. On information and belief, Defendants directly infringe, literally and/or under the doctrine of equivalents, at least claim 10 of the '555 Patent, which recites:

A content player device to stream a video over a network from a server for playback of the video, the content player device comprising:

a processor;

a digital processing apparatus memory device comprising non-transitory machine-readable instructions that, when executed, cause the processor to:

establish one or more network connections between the client module and the server, wherein the server is configured to access at least one of a plurality of groups of streamlets;

wherein the video is encoded at a plurality of different bitrates to create a plurality of streams including at least a low quality stream, a medium quality stream, and a high quality stream, wherein each of the low quality stream, the medium quality stream, and the high quality stream comprises a streamlet that encodes the same portion of the video at a different one of the plurality of different bitrates;

wherein at least one of the low quality stream, medium quality stream, and high quality stream is encoded at a bit rate of no less than 600 kbps; and

wherein the streamlet encoding the same portion of the video in the low quality stream has an equal playback duration as the streamlet encoding the same portion of the video in the high quality stream;

select a specific one of the streams based upon a determination by the client module to select a higher or lower bitrate version of the streams;

place a streamlet request to the server over the one or more network connections for the selected stream;

receive the requested streamlets from the server via the one or more network connections; and

provide the received streamlets for playback of the video.

102. The Accused Streaming Services receive segments of a selected video program for playback of programming over a network connection. The Accused Streaming Services adapt requests for segments from a set of segments with the same content but varying quality based upon

the quality of the network connection. Exhibit C-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.³

103. On information and belief, Defendants possess knowledge of, and are aware of, the '555 Patent, or became aware of this patent at the time of filing this lawsuit.

104. Defendants' acts of infringement have injured and damaged DISH and will continue to injure and damage DISH.

105. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon information and belief, Defendants will continue these infringing acts unless enjoined by this court.

INDIRECT INFRINGEMENT

106. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–105 of the Complaint as if fully set forth herein.

107. On information and belief, Defendants indirectly infringe, literally and/or under the doctrine of equivalents, at least claim 10 of the '555 Patent, which recites:

A content player device to stream a video over a network from a server for playback of the video, the content player device comprising:

a processor;

a digital processing apparatus memory device comprising non-transitory machine-readable instructions that, when executed, cause the processor to:

establish one or more network connections between the client module and the server, wherein the server is configured to access at least one of a plurality of groups of streamlets;

3. DISH notes that Exhibit C-1, Exhibits A-1 and B-1, *see supra*, and Exhibits D-1, and E-1, *see infra*, are based exclusively on publicly available information, and without the benefit of any Court claim construction. Accordingly, for each Count below, DISH reserves the right to supplement, amend or modify the analysis as warranted in light of additional facts, claim construction, or other developments. DISH further reserves the right to add additional claims as the case progresses.

wherein the video is encoded at a plurality of different bitrates to create a plurality of streams including at least a low quality stream, a medium quality stream, and a high quality stream, wherein each of the low quality stream, the medium quality stream, and the high quality stream comprises a streamlet that encodes the same portion of the video at a different one of the plurality of different bitrates;

wherein at least one of the low quality stream, medium quality stream, and high quality stream is encoded at a bit rate of no less than 600 kbps; and

wherein the streamlet encoding the same portion of the video in the low quality stream has an equal playback duration as the streamlet encoding the same portion of the video in the high quality stream;

select a specific one of the streams based upon a determination by the client module to select a higher or lower bitrate version of the streams;

place a streamlet request to the server over the one or more network connections for the selected stream;

receive the requested streamlets from the server via the one or more network connections; and

provide the received streamlets for playback of the video.

108. The Accused Streaming Services receive segments of a selected video program for playback of programming over a network connection. The Accused Streaming Services adapt requests for segments from a set of segments with the same content but varying quality based upon the quality of the network connection. Exhibit C-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.

INDIRECT INFRINGEMENT BY INDUCEMENT

109. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–108 of the Complaint as if fully set forth herein.

110. On information and belief, Defendants are liable for inducing infringement of the '555 Patent under 35 U.S.C. § 271(b) by having knowledge of the '555 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '555 Patent, with specific intent, by their customers.

111. Specifically, Defendants actively induce infringement of the '555 Patent by, *inter alia*, training their customers on the use of the Accused Streaming Services and/or promotion and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for implementing adaptive-rate content streaming as claimed in the '555 Patent.

112. Defendants' customers for the Accused Streaming Services directly infringe the '555 Patent by making, using, selling, and/or offering for sale the Accused Streaming Services.

113. For example, Defendants actively induce infringement of the '555 Patent, because Defendants have knowledge that end users of the Accused Streaming Services including, but not limited to, users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms, use Defendants' infringing Accused Streaming Services in the United States, and because Defendants encourage such acts resulting in direct patent infringement, by, *inter alia*, training, promotion, and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for their use of adaptive-rate content streaming as claimed in the '555 Patent. *See, e.g.*, Exhibit 17 (inviting customers to "try a sample workout and experience the Mirror"); Exhibit 18 (instructing users how to navigate the Mirror App to deliver live and on-demand content).

114. On information and belief, Defendants intend to, and continue to intend to, indirectly infringe the '555 Patent through inducement of the sale and use of the Accused Streaming Services.

115. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed

content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '555 Patent.

116. On information and belief, despite knowing that their actions constituted induced infringement of the '555 Patent and/or despite knowing that there was a high likelihood that their actions constituted induced infringement of the patent, Defendants nevertheless continued their infringing actions, and continue to make, use, and sell, the Accused Streaming Services.

117. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '555 Patent.

118. Defendants' acts of induced infringement have injured and damaged DISH and will continue to injure and damage DISH.

119. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon information and belief, Defendants will continue these infringing acts unless enjoined by this Court.

INDIRECT INFRINGEMENT BY CONTRIBUTORY INFRINGEMENT

120. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–119 of the Complaint as if fully set forth herein.

121. Defendants are liable for contributory infringement of the '555 Patent under 35 U.S.C § 271(c) by having sold or offered to sell, and continuing to sell or offer for sale the Accused Streaming Services within the United States because the Accused Streaming Services constitute a material part of the invention embodied in the '555 Patent, which Defendants know to be especially

made and/or especially adapted for use in infringement of the '555 Patent, and which is not a staple article or commodity of commerce suitable for substantial non-infringing use.

122. On information and belief, Defendants are liable for contributory infringement by having knowledge of the '555 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '555 Patent by their customers, including users and subscribers, who use the Accused Streaming Services.

123. Specifically, Defendants contribute to infringement of the '555 Patent by, *inter alia*, promotion, and/or sales of the infringing Accused Streaming Services to Defendants' customers, including users and subscribers, for their use of adaptive-rate content streaming as claimed in the '555 Patent. Those customers directly infringe the '555 Patent by using the Accused Streaming Services.

124. For example, Defendants are liable for contributory infringement by knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, Defendants' customers, including users and subscribers, to directly infringe the '555 Patent by using the Accused Streaming Services in the United States.

125. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '555 Patent and that the Accused Streaming Services were especially made and/or especially adapted for use in infringement of the '555 Patent and were not a staple article or commodity of commerce suitable for substantial non-infringing use.

126. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '555 Patent.

127. Defendants' past and ongoing infringement of the '555 Patent has and will continue to irreparably harm DISH.

128. Defendants' past and ongoing infringement of the '555 Patent has and will continue to cause DISH damages.

129. DISH is asserting claims 10 and 26 of the '555 Patent and some or all of the dependents to those claims.

COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 10,757,156

DIRECT INFRINGEMENT

130. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–129 of the Complaint as if fully set forth herein.

131. On information and belief, Defendants directly infringe, literally and/or under the doctrine of equivalents, at least claim 1 of the '156 Patent, which recites:

An apparatus for rendering a video that is adaptively received as a digital stream from a video server over a network, the apparatus comprising;

a media player operating on the apparatus, wherein the media player is configured to stream the video from the video server via at least one transmission control protocol (TCP) connection over the network, wherein the video server stores multiple different copies of the video encoded at different bit rates as multiple sets of streamlets, wherein each of the streamlets yields a different portion of the video on playback, wherein the streamlets across the different copies yield the same portions of the video on playback, and wherein the streamlets in the different copies are aligned in time such that the streamlets that play back the same portion of the video for the different copies each begin at the same playback time in relation to the beginning of the video, and wherein the media player streams the video by:

requesting sequential streamlets of one of the copies from the video server according to the playback times of the streamlets by transmitting hypertext transport protocol (HTTP) GET requests that identify the selected streamlets stored by the video server, wherein the sequential streamlets are selected by the media

player from the based upon successive determinations to shift the playback quality to a higher or lower quality one of the different copies of the video;

repeatedly generating, by the media player, a factor relating to the performance of the network that is indicative of an ability to sustain the streaming of the video;

adapting the successive determinations to shift the playback quality based on the factor to achieve continuous playback of the video using the streamlets of the highest quality copy of the video that is determined to be sustainable at that time; and

presenting the video for playback by providing the requested streamlets in order of ascending start time.

132. The Accused Streaming Services receive segments of selected video program for playback of programming over a network connection. The Accused Streaming Services adapt their requests for segments from a set of segments with the same content but varying quality based upon the quality of the network connection. Exhibit D-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.⁴

133. On information and belief, Defendants possess knowledge of, and are aware of, the '156 Patent, or became aware of this patent at the time of filing this lawsuit.

134. Defendants' acts of infringement have injured and damaged DISH and will continue to injure and damage DISH.

135. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon information and belief, Defendants will continue these infringing acts unless enjoined by this court.

INDIRECT INFRINGEMENT

⁴ DISH notes that Exhibit D-1 and Exhibits A-1, B-1, C-1, *see supra*, and E-1, *see infra*, are based exclusively on publicly available information, and without the benefit of any Court claim construction. Accordingly, for each Count below, DISH reserves the right to supplement, amend or modify the analysis as warranted in light of additional facts, claim construction, or other developments. DISH further reserves the right to add additional claims as the case progresses.

136. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–135 of the Complaint as if fully set forth herein.

137. On information and belief, Defendants indirectly infringe, literally and/or under the doctrine of equivalents, at least claim 1 of the '156 Patent, which recites:

An apparatus for rendering a video that is adaptively received as a digital stream from a video server over a network, the apparatus comprising;

a media player operating on the apparatus, wherein the media player is configured to stream the video from the video server via at least one transmission control protocol (TCP) connection over the network, wherein the video server stores multiple different copies of the video encoded at different bit rates as multiple sets of streamlets, wherein each of the streamlets yields a different portion of the video on playback, wherein the streamlets across the different copies yield the same portions of the video on playback, and wherein the streamlets in the different copies are aligned in time such that the streamlets that play back the same portion of the video for the different copies each begin at the same playback time in relation to the beginning of the video, and wherein the media player streams the video by:

requesting sequential streamlets of one of the copies from the video server according to the playback times of the streamlets by transmitting hypertext transport protocol (HTTP) GET requests that identify the selected streamlets stored by the video server, wherein the sequential streamlets are selected by the media player from the based upon successive determinations to shift the playback quality to a higher or lower quality one of the different copies of the video;

repeatedly generating, by the media player, a factor relating to the performance of the network that is indicative of an ability to sustain the streaming of the video;

adapting the successive determinations to shift the playback quality based on the factor to achieve continuous playback of the video using the streamlets of the highest quality copy of the video that is determined to be sustainable at that time; and

presenting the video for playback by providing the requested streamlets in order of ascending start time.

138. The Accused Streaming Services receive segments of a selected video program for playback of programming over a network connection. The Accused Streaming Services adapt requests for segments from a set of segments with the same content but varying quality based upon

the quality of the network connection. Exhibit D-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.

INDIRECT INFRINGEMENT BY INDUCEMENT

139. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–138 of the Complaint as if fully set forth herein.

140. On information and belief, Defendants are liable for inducing infringement of the '156 Patent under 35 U.S.C. § 271(b) by having knowledge of the '156 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '156 Patent, with specific intent, by their customers.

141. Specifically, Defendants actively induce infringement of the '156 Patent by, *inter alia*, training their customers on the use of the Accused Streaming Services and/or promotion and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for implementing adaptive-rate content streaming as claimed in the '156 Patent.

142. Defendants' customers for the Accused Streaming Services directly infringe the '156 Patent by making, using, selling, and/or offering for sale the Accused Streaming Services.

143. For example, Defendants actively induce infringement of the '156 Patent, because Defendants have knowledge that end users of the Accused Streaming Services including, but not limited to, users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms, use Defendants' infringing Accused Streaming Services in the United States, and because Defendants encourage such acts resulting in direct patent infringement, by, *inter alia*, training, promotion, and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital

mobile platforms, and digital connected device platforms for their use of adaptive-rate content streaming as claimed in the '156 Patent. *See, e.g.*, Exhibit 17 (inviting customers to “try a sample workout and experience the Mirror”); Exhibit 18 (instructing users how to navigate the Mirror App to deliver live and on-demand content).

144. On information and belief, Defendants intend to, and continue to intend to, indirectly infringe the '156 Patent through inducement of the sale and use of the Accused Streaming Services.

145. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '156 Patent.

146. On information and belief, despite knowing that their actions constituted induced infringement of the '156 Patent and/or despite knowing that there was a high likelihood that their actions constituted induced infringement of the patent, Defendants nevertheless continued their infringing actions, and continue to make, use, and sell, the Accused Streaming Services.

147. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '156 Patent.

148. Defendants' acts of induced infringement have injured and damaged DISH and will continue to injure and damage DISH.

149. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon

information and belief, Defendants will continue these infringing acts unless enjoined by this Court.

INDIRECT INFRINGEMENT BY CONTRIBUTORY INFRINGEMENT

150. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–149 of the Complaint as if fully set forth herein.

151. Defendants are liable for contributory infringement of the '156 Patent under 35 U.S.C § 271(c) by having sold or offered to sell, and continuing to sell or offer for sale the Accused Streaming Services within the United States because the Accused Streaming Services constitute a material part of the invention embodied in the '156 Patent, which Defendants know to be especially made and/or especially adapted for use in infringement of the '156 Patent, and which is not a staple article or commodity of commerce suitable for substantial non-infringing use.

152. On information and belief, Defendants are liable for contributory infringement by having knowledge of the '156 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '156 Patent by their customers, including users and subscribers, who use the Accused Streaming Services.

153. Specifically, Defendants contribute to infringement of the '156 Patent by, *inter alia*, promotion, and/or sales of the infringing Accused Streaming Services to Defendants' customers, including users and subscribers, for their use of adaptive-rate content streaming as claimed in the '156 Patent. Those customers directly infringe the '156 Patent by using the Accused Streaming Services.

154. For example, Defendants are liable for contributory infringement by knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, Defendants'

customers, including users and subscribers, to directly infringe the '156 Patent by using the Accused Streaming Services in the United States.

155. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '156 Patent and that the Accused Streaming Services were especially made and/or especially adapted for use in infringement of the '156 Patent and were not a staple article or commodity of commerce suitable for substantial non-infringing use.

156. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '156 Patent.

157. Defendants' past and ongoing infringement of the '156 Patent has and will continue to irreparably harm DISH.

158. Defendants' past and ongoing infringement of the '156 Patent has and will continue to cause DISH damages.

159. DISH is asserting claim 1 of the '156 Patent and some or all of the dependents to that claim.

COUNT V: INFRINGEMENT OF U.S. PATENT NO. 10,951,680

DIRECT INFRINGEMENT

160. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–159 of the Complaint as if fully set forth herein.

161. On information and belief, Defendants directly infringe, literally and/or under the doctrine of equivalents, at least claim 14 of the '680 Patent, which recites:

An end user station to stream a video over a network from a server for playback of the video, the content player device comprising:

a processor;

a digital processing apparatus memory device comprising non-transitory machine-readable instructions that, when executed, cause the processor to:

establish one or more network connections between the end user station and the server, wherein the server is configured to access at least one of a plurality of groups of streamlets;

wherein the video is encoded at a plurality of different bitrates to create a plurality of streams including at least a low quality stream, a medium quality stream, and a high quality stream, each of the low quality stream, the medium quality stream, and the high quality stream comprising a group of streamlets encoded at the same respective one of the different bitrates, each group comprising at least first and second streamlets, each of the streamlets corresponding to a portion of the video;

wherein at least one of the low quality stream, the medium quality stream, and the high quality stream is encoded at a bit rate of no less than 600 kbps; and wherein the first streamlets of each of the low quality stream, the medium quality stream and the high quality stream each has an equal playback duration and each of the first streamlets encodes the same portion of the video at a different one of the different bitrates;

select a specific one of the low quality stream, the medium quality stream, and the high quality stream based upon a determination by the end user station to select a higher or lower bitrate version of the streams;

place at least one virtual timeline request for at least one virtual times based on the selected one of the low quality stream, the medium quality stream, and the high quality stream; and

receive the at least one virtual timeline.

162. The Accused Streaming Services receive segments of a selected video program for playback of programming over a network connection. The Accused Streaming Services adapt requests for segments from a set of segments with the same content but varying quality based upon the quality of the network connection. Exhibit E-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.⁵

163. On information and belief, Defendants possess knowledge of, and are aware of, the '680 Patent, or became aware of this patent at the time of filing this lawsuit.

164. Defendants' acts of infringement have injured and damaged DISH and will continue to injure and damage DISH.

165. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon information and belief, Defendants will continue these infringing acts unless enjoined by this court.

INDIRECT INFRINGEMENT

166. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–165 of the Complaint as if fully set forth herein.

167. On information and belief, Defendants indirectly infringe, literally and/or under the doctrine of equivalents, at least claim 14 of the '680 Patent, which recites:

An end user station to stream a video over a network from a server for playback of the video, the content player device comprising:

a processor;

⁵ DISH notes that Exhibit E-1 and Exhibits A-1, B-1, C-1, and D-1, *see supra*, are based exclusively on publicly available information, and without the benefit of any Court claim construction. Accordingly, for each Count below, DISH reserves the right to supplement, amend or modify the analysis as warranted in light of additional facts, claim construction, or other developments. DISH further reserves the right to add additional claims as the case progresses.

a digital processing apparatus memory device comprising non-transitory machine-readable instructions that, when executed, cause the processor to:

establish one or more network connections between the end user station and the server, wherein the server is configured to access at least one of a plurality of groups of streamlets;

wherein the video is encoded at a plurality of different bitrates to create a plurality of streams including at least a low quality stream, a medium quality stream, and a high quality stream, each of the low quality stream, the medium quality stream, and the high quality stream comprising a group of streamlets encoded at the same respective one of the different bitrates, each group comprising at least first and second streamlets, each of the streamlets corresponding to a portion of the video;

wherein at least one of the low quality stream, the medium quality stream, and the high quality stream is encoded at a bit rate of no less than 600 kbps; and wherein the first streamlets of each of the low quality stream, the medium quality stream and the high quality stream each has an equal playback duration and each of the first streamlets encodes the same portion of the video at a different one of the different bitrates;

select a specific one of the low quality stream, the medium quality stream, and the high quality stream based upon a determination by the end user station to select a higher or lower bitrate version of the streams;

place at least one virtual timeline request for at least one virtual times based on the selected one of the low quality stream, the medium quality stream, and the high quality stream; and

receive the at least one virtual timeline.

168. The Accused Streaming Services receive segments of a selected video program for playback of programming over a network connection. The Accused Streaming Services adapt requests for segments from a set of segments with the same content but varying quality based upon the quality of the network connection. Exhibit E-1 to this Complaint is a claim chart with a more detailed infringement analysis of the Accused Streaming Services.

INDIRECT INFRINGEMENT BY INDUCEMENT

169. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–168 of the Complaint as if fully set forth herein.

170. On information and belief, Defendants are liable for inducing infringement of the '680 Patent under 35 U.S.C. § 271(b) by having knowledge of the '680 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '680 Patent, with specific intent, by their customers.

171. Specifically, Defendants actively induce infringement of the '680 Patent by, *inter alia*, training their customers on the use of the Accused Streaming Services and/or promotion and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for implementing adaptive-rate content streaming as claimed in the '680 Patent.

172. Defendants' customers for the Accused Streaming Services directly infringe the '680 Patent by making, using, selling, and/or offering for sale the Accused Streaming Services.

173. For example, Defendants actively induce infringement of the '680 Patent, because Defendants have knowledge that end users of the Accused Streaming Services including, but not limited to, users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms, use Defendants' infringing Accused Streaming Services in the United States, and because Defendants encourage such acts resulting in direct patent infringement, by, *inter alia*, training, promotion, and/or sales of the Accused Streaming Services to Defendants' customers including, but not limited to, end-users, subscribers, digital streaming platforms, digital mobile platforms, and digital connected device platforms for their use of adaptive-rate content streaming as claimed in the '680 Patent. *See, e.g.*, Exhibit 17 (inviting customers to "try a sample workout and experience the Mirror"); Exhibit 18 (instructing users how to navigate the Mirror App to deliver live and on-demand content).

174. On information and belief, Defendants intend to, and continue to intend to, indirectly infringe the '680 Patent through inducement of the sale and use of the Accused Streaming Services.

175. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '680 Patent.

176. On information and belief, despite knowing that their actions constituted induced infringement of the '680 Patent and/or despite knowing that there was a high likelihood that their actions constituted induced infringement of the patent, Defendants nevertheless continue their infringing actions, and continue to make, use, and sell, the Accused Streaming Services.

177. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '680 Patent.

178. Defendants' acts of induced infringement have injured and damaged DISH and will continue to injure and damage DISH.

179. Defendants' actions have caused DISH to suffer irreparable harm resulting from the loss of its lawful patent rights and the loss of its ability to exclude others from the market. Upon information and belief, Defendants will continue these infringing acts unless enjoined by this Court.

INDIRECT INFRINGEMENT BY CONTRIBUTORY INFRINGEMENT

180. DISH re-alleges and incorporates herein by reference the allegations contained in Paragraphs 1–179 of the Complaint as if fully set forth herein.

181. Defendants are liable for contributory infringement of the '680 Patent under 35 U.S.C § 271(c) by having sold or offered to sell, and continuing to sell or offer for sale the Accused Streaming Services within the United States because the Accused Streaming Services constitute a material part of the invention embodied in the '680 Patent, which Defendants know to be especially made and/or especially adapted for use in infringement of the '680 Patent, and which is not a staple article or commodity of commerce suitable for substantial non-infringing use.

182. On information and belief, Defendants are liable for contributory infringement by having knowledge of the '680 Patent and knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, direct infringement of the '680 Patent by their customers, including users and subscribers, who use the Accused Streaming Services.

183. Specifically, Defendants contribute to infringement of the '680 Patent by, *inter alia*, promotion, and/or sales of the infringing Accused Streaming Services to Defendants' customers, including users and subscribers, for their use of adaptive-rate content streaming as claimed in the '680 Patent. Those customers directly infringe the '680 Patent by using the Accused Streaming Services.

184. For example, Defendants are liable for contributory infringement by knowingly causing or intending to cause, and continuing to knowingly cause or intend to cause, Defendants' customers, including users and subscribers, to directly infringe the '680 Patent by using the Accused Streaming Services in the United States.

185. Adaptive bitrate streaming is a well-defined field of technology with only a few major developers, including Apple, Microsoft, Adobe and DISH since its acquisition and continuing development of MOVE's patent portfolio. On information and belief, as a provider of streamed content, Defendants would have monitored developments relating to adaptive-rate content

streaming technology, including DISH's ABR technology, and knew, or at the very least, should have known, about the issuance of the '680 Patent and that the Accused Streaming Services were especially made and/or especially adapted for use in infringement of the '680 Patent and were not a staple article or commodity of commerce suitable for substantial non-infringing use.

186. Defendants continue to provide the Accused Streaming Services with full knowledge and disregard of the ABR Patents, including the '680 Patent.

187. Defendants' past and ongoing infringement of the '680 Patent has and will continue to irreparably harm DISH.

188. Defendants' past and ongoing infringement of the '680 Patent has and will continue to cause DISH damages.

189. DISH is asserting claims 14 and 28 of the '680 Patent and some or all of the dependents to those claims.

JURY DEMAND

Pursuant to Fed. R. Civ. P. 38(b), Plaintiffs hereby request a trial by jury of all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, DISH respectfully requests that this Court enter:

A. A judgment in favor of DISH that Defendants have infringed the ABR Patents, directly, jointly, and/or indirectly by way of inducing and/or contributing to the infringement of the ABR Patents;

B. An order of this Court permanently enjoining Defendants and their officers, directors, agents, affiliates, employees, divisions, branches, subsidiaries, parents, and all others in active concert therewith from infringing, including inducing the infringement of, or contributing to the infringement of, the ABR Patents;

C. A judgment and order requiring Defendants to pay DISH its damages, costs, expenses, and pre-judgment and post-judgment interest for Defendants' infringement of the ABR Patents, as provided under 35 U.S.C. § 284;

D. An accounting of lost sales not presented at trial and an award of additional damages for any such lost sales; and

E. Such other and further relief to which DISH may show itself to be entitled and/or as the Court may deem just and proper.

ASHBY & GEDDES

/s/ John G. Day

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